

### REMARKS

The Official Action mailed February 17, 2010, has been received and its contents carefully noted. Filed concurrently herewith is a *Request for One Month Extension of Time*, which extends the shortened statutory period for response to June 17, 2010. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on June 12, 2006; September 18, 2006; February 20, 2008; and June 24, 2008.

Claims 1-12 were pending in the present application prior to the above amendment. Claims 1-12 have been canceled without prejudice or disclaimer, and new claims 13-24 have been added to better recite the features of the present invention. Accordingly, claims 13-24 are now pending in the present application, of which claims 13, 19 and 21-24 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 4 of the Official Action rejects claims 1-6 as obvious based on the combination of U.S. Patent No. 5,835,508 to Kushita and U.S. Publication No. 2002/0040460 to Choi. Paragraph 12 of the Official Action rejects claims 7 and 8 as obvious based on the combination of Kushita, U.S. Patent No. 5,457,705 to Todoroki and Choi. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application.

As stated in MPEP §§ 2142-2144.04, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some reason to do so found

either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. Claim 1-12 have been canceled without prejudice or disclaimer, and claims 13-24 have been added. Claims 13-24 recite the following features:

In original data to be transmitted, there are data to be protected (that is, data having higher importance) and data not to be protected (as recited in each of the independent claims 13, 21 and 23).

When a transmission environment in a communication path is good, additional information data associated with the original data is added to the data to be protected to create encoded data. On the other hand, when the transmission environment is bad, a redundant bit is added to the data to be protected to create the encoded data (as recited in each of the independent claims 13, 21 and 23).

As for the data not to be protected, no data is added thereto and a pair or set of data is encoded regardless of whether the transmission environment is good or bad (as recited in each of independent claims 13, 21 and 23).

Independent claims 19, 22 and 24 recite similar features.

The addition of a redundant bit causes a Euclidian distance in a symbol constellation to be extended, and the redundant bit data is added to each of the bits of the data to be protected so that a gray code is produced (as recited in dependent claims 14 and 15, respectively).

The Applicant respectfully submits that Kushita and Choi or Kushita, Todoroki and Choi, either alone or in combination, do not teach or suggest at least the above-referenced features of the present invention.

Since Kushita and Choi or Kushita, Todoroki and Choi do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(a), 1.20(b), 1.20(c), and 1.20(d) (except the Issue Fee) which may be required now or hereafter, or credit any overpayment to Deposit Account No. 50-2280.

Respectfully submitted,



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